



# University of Choice) MASINDE MULIRO UNIVERSITY OF SCIENCE AND TECHNOLOGY (MMUST)

(MAIN CAMPUS)

### UNIVERSITY EXAMINATIONS 2023/2024 ACADEMIC YEAR

#### THIRD YEAR FIRST SEMESTER EXAMINATIONS

## FOR THE BACHELOR OF SCIENCE IN EPIDEMIOLOGY AND BIOSTATISTICS

COURSE CODE:

**HEM 315** 

**COURSE TITLE:** OCCUPATIONAL EPIDEMIOLOGY

DATE: 6.12.2023

TIME: 8.00-10.00 AM

**INSTRUCTIONS:** This paper consist of two sections (Section A and Section B) 2. Answer ALL the questions in section A and any TWO questions in section B

MMUST observes ZERO tolerance to examination cheating

This Paper Consists of 2 Printed Pages. Please Turn Over

### Section A: Attempt all questions in this section

- 1. Define the following terms as used in occupational Epidemiology
  - i. Analytical Epidemiology
  - ii. Safety
  - iii. Health
  - iv. Occupation
  - v. Work environment
- 2. Name the series of activities in exposure assessment (4 marks)
- 3. Highlight four ways of preventing frostbite (4 marks)
- 4. Describe the effect of poor environment to work performance (4 marks)
- 5. In tool selection the best tool should have the following characteristic which ones? (4 marks)
- 6. Name some of the important human dimensions in ergonomics and there importance (4 marks)
- 7. Determine four effects of radiation on living cells (4 marks)
- 8. State any four routes of entry of hazards into the human body (4 marks)
- 9. State four potential Effects of Fatigue on Work

4 marks

10.Explain epidemiologic designs that can be used in occupational epidemiology

5 marks

### Section B: Attempt only 2 questions in this section

- 1. A) Discuss the effect of vibration as an occupational hazard (10 marks)
  - B) You are a research assistant in hospital setting how do you control infection or exposure to biological hazards? (5 marks)
- 2. A Evaluate the challenges for the development of occupational health and safety 15 marks
- 3. A) What are some of the ways in which the effects of chemical hazards are classified? (10 marks)
  - B) Discuss the difference between static muscle work and dynamic muscle activity? (5 marks)